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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,672	03/29/2005	Seung-Lim Jee	1508-4 PCT/US	1678

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EXAMINER
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FLETCHER, JAMES A

ART UNIT	PAPER NUMBER
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2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,672	<b>Applicant(s)</b> JEE, SEUNG-LIM	
	<b>Examiner</b> JAMES A. FLETCHER	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: In paragraph 0025, a close quote is missing, apparently from line 2.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 8-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Unemura (US PG Pub 2004/0158851).

**Regarding claims 1 and 8**, Unemura discloses a method and apparatus for providing TV plaza function to a set top box, comprising:

i) providing a set top box composed of:

a) a signal input interface which receives a TV plaza information signal as well as a broadcast signal (Fig. 3, #2, "Tuner");

b) a DEMUX which classifies and separates the TV Plaza information signal from the broadcast signal (Fig. 3, #3 "Demultiplexer");

c) a signal output interface connected to a user's TV, which decodes the TV plaza information signal as well as the broadcast signal and transmits the decoded signals to the user's TV (Fig. 3, #11, "Controller");

d) a microprocessor which generates a command to control the set top box (Fig. 3, #13, "Input Setting Unit"); and

e) a storage device which stores the TV plaza information signal (Paragraph 0119 "The EPG processor 10 decodes the EPG data output from the demultiplexer 3, together with the second rating information, and stores the decoded EPG data");

ii) transmitting to the signal input interface the TV plaza information and the broadcast signal, each independently (Fig. 1);

iii) transmitting the broadcast signal of the two signals to a user's TV under control of the microprocessor (Paragraph 0117 "The display 6 is constituted by a CRT [Cathode-Ray Tube], an LCD [Liquid Crystal Display], or the like, and displays the RGB signal fed from the RGB processor 5 as a video"), the broadcast signal being separated from the TV plaza information signal by the action of the DEMUX and decoded by the signal output interface (Paragraph 0119 "The EPG processor 10 decodes the EPG data output from the demultiplexer 3");

iv) storing independently of a user's request the TV plaza information signal separated from the broadcast signal by the action of the DEMUX into the storage device, and constructing a TV plaza within the set top box (Paragraph 0119 "The EPG processor 10 decodes the EPG data output from the demultiplexer 3, together with the second rating information, and stores the decoded EPG data"); and,

v) under control of the microprocessor in response to a user's request to display the previously stored TV plaza information, transmitting the TV plaza information signal

to a user's TV through the DEMUX and the signal output interface which decodes the TV plaza information signal (Paragraph 0124 "When a request to present the electronic program guide is issued from the input setting unit 13, the electronic program guide shown in FIG. 3 is displayed on the display 6 on the basis of the EPG data from the EPG processor 10").

**Regarding claims 2 and 9**, Unemura discloses a set top box wherein the signal input interface comprises a tuner which receives the TV plaza information signal as well as the broadcast signal and a channel decoder which extracts a user-requested channel from the received broadcast signal under control of a microprocessor (Fig. 3).

**Regarding claims 3 and 10**, Unemura discloses a set top box wherein the signal output interface comprises at least one decoder selected from the group consisting of a data decoder, a video decoder and an audio decoder (Fig. 3, #7 "Audio Decoder" and #4 "Video Decoder" and #10 "EPG Processor").

**Regarding claims 5 and 12**, Unemura discloses a set top box wherein the TV plaza information signal is a composite signal selected from the group consisting of a data signal, a video signal and an audio signal, and the DEMUX separates the composite signal and transmits the separated signals to the corresponding decoders (Fig. 3).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unemura as applied to claims above, further in view of Schein et al (6,732,369).

**Regarding claims 4 and 11**, Unemura discloses a set top box wherein the TV plaza information signal is a digitally encoded information signal (Paragraph 0010 “Rating information is transmitted as packet data”), but does not disclose the additional information includes advertisement information, education information, stock information and weather information.

Schein et al teach a set-top box that includes additional information including advertising information (Col. 17, lines 34-36 “When the Services button is pressed, the user is given choices such as News, Weather, Sports, Scores, Financial Data, Local Traffic, Network, etc.”).

As taught by Schein et al, additional data in a set-top box for various purposes is well known, providing the program source with a means of additional revenue and the customer with means for personalized information delivery. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Unemura in order to include advertising, education, stock, and weather.

6. Claims 6, 7, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unemura as applied to claim 1 above, and further in view of Hamada et al (6,931,198).

**Regarding claims 6 and 13**, Unemura is silent regarding the use of encryption and the use of that encryption to make a purchase

Hamada et al teach a set top-box comprising a cryptographic module (Col 18, lines 4-7 “a PMT includes, for example, components...constituting each channel and the PID of an encryption control message (ECM) packet required for descrambling” and Col 22, lines 22-28 “the demultiplexer 70 separates necessary transport packets from the transport stream sent from the descrambler 52 according to a filter condition specified by a DeMUX driver 82 in the CPU 80, uses the queue 71 as a work area, if necessary, obtains data in the format shown in FIG. 7(e) to FIG. 7(h), and sends them to the corresponding functional-circuit sections”) and the method further comprises a step of ordering an article to be purchased with the cryptographic module (Col 13, lines 23-25 “a product-introduction program called TV shopping is broadcasted first, and then a GUI screen is provided in order to make a purchase contract”).

As taught by Hamada et al, cryptographic modules and their use in making purchases are well known, provide the vendor with a useful marketing tool, and provide the user with a simple and secure interface for purchasing products and services.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Unemura by including a cryptographic module used for purchases.

**Regarding claims 7 and 14**, Unemura is silent regarding the use of a return path.

Hamada et al teach a set top box comprising a module to send a return path message to a server managed by a TV plaza operator, when the TV plaza information is safely received and stored into the storage device (Col 24, lines 62-65 “A modem 63 is

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connected to the accounting server 5 through the telephone line 4. The CPU 80 controls the modem 63 such that the IRD 12 communicates with the accounting server 5").

As taught by Hamada et al, upstream communications from set top boxes is well known, and provides the vendor with a means of determining the consistency of his transmissions and the user's activity.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Unemura in order to provide a return path connection for the set top box.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. FLETCHER whose telephone number is (571)272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF

19 May 2008

/ROBERT CHEVALIER/

Primary Examiner, Art Unit 2621

May 23, 2008.